~~Withhold from Public Disclosure in accordance with 10CFR2.390~~

NINE MILE POINT NUCLEAR STATION

OPERATOR JOB PERFORMANCE MEASURE

Title: Lineup for RPV Injection using the Liquid Poison Test Tank Revision: NRC 2006

Task Number: 2009180504

Approvals:

12/23/2007

General Supervisor Operations Training (Designee) / Date

NA EXAM SECURITY

General Supervisor Operations (Designee) / Date

NA EXAM SECURITY

Configuration Control / Date

Performer:_____(RO/SRO)

Trainer/Evaluator:_____

Evaluation Method: _____ Perform ____X____ Simulate

Evaluation Location: ____X____ Plant _____ Simulator

Expected Completion Time: 15 min Time Critical Task: NO Alternate Path Task: NO

Start Time: _____ Stop Time:_____ Completion Time:_____

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluators Signature:_____ Date:_____

[redacted]
Recommended Start Location: (Completion time based on the start location)

Reactor Building (RB 298') LP pumps

Simulator Set-up (if required):

NA

Directions to the Instructor/Evaluator:

Prior to performance of this JPM, obtain SM / CSO general permission to open equipment cabinets and inspection covers. If opening the equipment cabinet or inspection cover will affect Tech. Spec. Operability, operational status, or the effects are unknown, obtain specific SM / CSO permission.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SM, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, the use of applicable methods of verification and checking are expected. Therefore, either another individual or I will act as the independent verifier or peer checker.

Notes to Instructor / Evaluator:

1. Critical steps are identified in grading areas **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
   - Self checking shall be demonstrated.
3. During Training JPM:
   - Self checking shall be demonstrated.
   - Peer checking shall be demonstrated.

References:

1. N1-EOP-1 Attachment 12
2. NUREG 1123, 295031, EA1.08, 3.8/3.9

Tools and Equipment:

1. None

Task Standard: The Liquid Poison System is lined up for RPV injection utilizing the test tank.

Initial Conditions:

1. EOP-2 has been entered.
2. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), lineup the Liquid Poison System for RPV injection from the Test Tank in accordance with N1-EOP-1, Attachment 12."

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary.*	Proper communications used for repeat back (GAP-OPS-01/ CNG-HU-1.01-1001)	Sat/Unsat
RECORD START TIME _____		
2. Obtain a copy of the reference procedure and review/utilize the correct section of the procedure.	☐ N1-EOP-1 Attachment 12 is obtained and referenced.	Sat/Unsat
NOTE: VA-1 key (standard operations issued key) is required to unlock manual system valves.		
3. Unlock and close 41-05. BV-LIQUID POISON TANK OUTLET.	☐ 41-05 unlocked and shut (fully clockwise). Located on RB 298'.	**Pass/Fail**
Cue: 41-05 is shut.		
4. Open 41-03, BV DEMIN WATER TO LP TEST TANK and fill test tank with Demin Water.	☐ The test tank is approximately full and 41-03 is shut (full clockwise).	**Pass/Fail**
Cue: Test Tank is full.		
5. Unlock and open the following valves: • 41-06, BV-LP PUMP 11 SUCTION FROM TEST TANK • 41-18, BV-LP PUMP 12 SUCTION FROM TEST TANK	☐ 41-06 and 41-18 unlocked and opened (fully counterclockwise).	**Pass/Fail**
Cue: 41-06 and 41-18 open.		

Performance Steps	Standard	Grade
6. Control Room informed that LP is lined up for RPV injection using test tank. Cue: Role play for communication, notify Operator that LP Pump 12 has been Started and Test Tank level is ½ full and lowering.	☐ Control Room notified.	Sat/Unsat
7. Throttle 41-03, BV DEMIN WATER TO LP TEST TANK to maintain tank approximately ½ full. Cue: Test Tank level is now being maintained about ½ full.	☐ Test tank level maintained at approximately ½ full by throttling 41-03.	**Pass/Fail**
8. Notify SRO of status.	☐ SRO notified of status.	Sat/Unsat

END OF JPM

Terminating Cue: Liquid poison system is lined up for injection to the RPV utilizing the test tank.

RECORD STOP TIME _____

[redacted]

JPM HISTORY

JPM HISTORY PAGE				
Revision	Date	Change Driver	Originator	Description
0	8/3/06	LC1 05-01 NRC Exam	G. Bobka	Created as new JPM for Unit 1 LC1 05-01 NRC Exam
0	10/6/06	LC1 05-01 NRC Exam	W. Coppom	Walkdown performed with Wade Coppom and Eric Kelsey.

Initial Conditions:

1. EOP-2 has been entered.
2. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), lineup the Liquid Poison System for RPV injection from the Test Tank, in accordance with N1-EOP-1, Attachment 12."

[redacted] from Public Disclosure in accordance with [redacted]

NINE MILE POINT NUCLEAR STATION
OPERATOR JOB PERFORMANCE MEASURE

Title: Transfer UPS Loads from UPS162A to 162B (Alternate Path) Revision: NRC 2006

Task Number: 2620140101

Approvals:

_____ / 2/23/2007
General Supervisor Date
Operations Training (Designee)

NA EXAM SECURITY / _____
General Supervisor Date
Operations (Designee)

NA EXAM SECURITY / _____
Configuration Control Date

Performer:_____(RO/SRO)

Trainer/Evaluator:_____

Evaluation Method: _____ Perform ____X____ Simulate

Evaluation Location: _X_____ Plant _____ Simulator

Expected Completion Time: 15 Minutes Time Critical Task: NO Alternate Path Task: YES

Start Time: _____ Stop Time:_____ Completion Time:_____

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluators Signature:_____ Date:_____

Recommended Start Location: (Completion time based on the start location)
TB 261' between DG Room and Aux Control Room
Simulator Set-up (if required):
None
Directions to the Instructor/Evaluator:
Prior to performance of this JPM, obtain SM / CSO general permission to open equipment cabinets and inspection covers. If opening the equipment cabinet or inspection cover will affect Tech. Spec. Operability, operational status, or the effects are unknown, obtain specific SM / CSO permission.
Directions to Operators:
Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SM, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, the use of applicable methods of verification and checking are expected. Therefore, either another individual or I will act as the independent verifier or peer checker.

Notes to Instructor / Evaluator:

1. Critical steps are identified in grading areas **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
   - Self checking shall be demonstrated.
3. During Training JPM:
   - Self checking shall be demonstrated.
   - Peer checking shall be demonstrated.

References:
1. NUREG 1123, 212000, A2.02, RO 3.7, SRO 3.9
2. N1-OP-40, Reactor Protection and ATWS Systems
3. N1-SOP-40.1 – LOSS OF RPS

Tools and Equipment:
1. None

Task Standard: RPS Bus Transferred from UPS 162A to UPS 162B.

[redacted]

Initial Conditions:
1. Plant at 100% power
2. UPS 162A in service supplying RPS Bus 11
3. UPS 162B in standby
4. Instructor to ask operator for any questions

Initiating Cues:
"(Operator's name), transfer RPS Bus 11 from UPS 162A to UPS 162B per N1-OP-40."

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary.*	Proper communications used for repeat back (GAP-OPS-O1/Operations Manual)	Sat/Unsat
RECORD START TIME _____		
2. Obtain a copy of the reference procedure and review/utilize the correct section of the procedure.	☐ N1-OP-40 obtained. Precautions & limitations reviewed & section F.1.0 referenced.	Sat/Unsat
3. Notify Control Room that RPS Bus 11 will be transferred from UPS 162A to UPS 162B	☐ Proper communications used for repeat back per GAP-OPS-01/Ops Manual.	Sat/Unsat
4. At UPS 162B, verify UPS 162B in standby by observing the following:	At UPS 162B, verify UPS 162B in standby by observing the following:	
• Rectifier Output (A404) approximately 40 amps	☐ Rectifier Output on Rectifier Bay 1 reading 40 amps	Sat/Unsat
• Battery DC Input (A1) 0 amps	☐ Battery DC input on Inverter Bay 2 reading 0 amp.	Sat/Unsat
• Inverter Voltage (V2) ≥ 120 VAC	☐ Inverter output on Inverter Bay 3 reads 120 VAC.	Sat/Unsat
• Static Switch Output (V202) ≥ 120 VAC	☐ Static Switch Output on Static Bay 4 reads 120 VAC.	Sat/Unsat

Cue: A404 = 40 amps, A1 = 0 amps
V2 = 120 VAC, V202 = 120 VAC

Performance Steps	Standard	Grade
5. Place in ON position, Synchroscope Control (S701) and verify the following: UPS A Volts (To Synchroscope) approximately 120 VAC. UPS B Volts (To Synchroscope) approximately 120 VAC	☐ On Manual Transfer Switch Cab., place Synchroscope Control toggle switch in ON. ☐ Observe UPS A Volts to left of synch switch 120-122 VAC. ☐ Observe UPS B Volts to right of synch switch as 120-124 VAC	**Pass/Fail** Sat/Unsat Sat/Unsat
Cue: UPS A Volts = 120 VAC, UPS B Volts = 120 VAC		
Note: There is not expected to be a frequency or phase difference between UPS A and UPS B. Therefore, the operator should expect the synchroscope to be at the 12 o'clock position.		
6. Verify synchroscope on Manual Transfer Switch Cab. Rotating slowly in the FAST direction, or is at the 12 o'clock position.	☐ Observe synchroscope on Manual Transfer Switch Cab. Rotating slowly in the FAST (clockwise) direction, or is at the 12 o'clock position.	Sat/Unsat
Cue: Sync Scope is at the 12 o'clock position		
7. When needle of synchroscope is within 10 degrees of 12 o'clock position, then place Manual Transfer Switch (S702) to the UPS B Supplying Load position.	☐ Observe synchroscope at/within 10 degrees before 12 o'clock position and firmly rotate switch counterclockwise to the UPS B supplying Load protection.	**Pass/Fail**
Note: Operation of the manual transfer switch is a two handed operation		
8. Confirm load transfer on the Manual Transfer Switch Cab. By observing the following:	At the Manual Transfer Switch Cab. observes the following:	
• UPS A Supplying Load Light OFF	☐ Observe UPS A Supply Load Light extinguished.	Sat/Unsat
AND/OR		
• UPS 162A Static Switch Output (A202) 0 amps	☐ On Static Switch Bay 4 for UPS, Observe Static Switch Output ammeter for UPS 162A at 0 amps	Sat/Unsat
CUE: UPS A Supply Light is extinguished, A202 on UPS 162A = 0 amps		

Performance Steps	Standard	Grade
• UPS B Supplying Load Light ON	☐ Observe UPS B Supply Load Light extinguished.	Sat/Unsat
AND/OR		
• UPS 162B Static Switch Output (A202) approximately 80-90 amps	☐ Observe Static Switch Output ammeter for UPS 162B at 0 amps.	Sat/Unsat
Cue: UPS B Supplying Light extinguished, A202 on UPS 162B = 0 amps		Sat/Unsat
9. Verify no unanticipated annunciators or computer points present due to UPS 162B supply power.	☐ Recognize unexpected condition and contact the Control Room to inquire about any unexpected alarms or computer points received during transfer to UPS 162B supplying power.	Sat/Unsat
Cue: Multiple unexpected alarms received in the control room. There is a ½ SCRAM on channel 11, execute N1-SOP-40.1.		
10. Determine that RPS 11 was lost.	☐ Proceed to the correct step in N1-SOP-40.1.	**Pass/Fail**
11. Contact the Control Room and determine if Computer Point G183 (UPS 162 Prot Relay Oper-TRBL) is in alarm.	☐ Proper communication used.	Sat/Unsat
Cue: Computer Point G183 (UPS 162 Prot Relay Oper-TRBL) is in alarm.		
12. Verify I&C Bus 130A is available to carry RPS Loads.	☐ Proper communication used.	Sat/Unsat
Cue: I&C Bus 130A is available to carry RPS loads.		
13. Notify the CSO that dead bus transfer is to be performed.	☐ Proper communication used.	Sat/Unsat
14. Review list of affected systems in N1-SOP-40.1, Loss of RPS Bus, for the RPS channel to be de-energized.	☐ Reviewed N1-SOP-40.1	Sat/Unsat
Cue: The list of affected systems has been reviewed		

[redacted]

Performance Steps	Standard	Grade
15. Review Attachment 6 AND current plant conditions for possible Technical Specification impact **Cue:** Attachment 6 and all Technical Specification impacts have been reviewed.	☐ Contact Control Room to ensure N1-SOP-40.1 Attachment 6 has been reviewed for Technical Specification impact.	Sat/Unsat
16. Confirm NO ½ scram signals are present OR anticipated due to testing on the opposite RPS Bus AND notify the CSO that performance of the following step will initiate a ½ scram	☐ Contact Control Room and notify the CSO that you are transferring RPS Bus #11 to I&C Bus 130A	Sat/Unsat
17. Open R.P.S. BUS #11 NORMAL SUPPLY FROM UPS 162	☐ Open R.P.S. BUS #11 NORMAL SUPPLY FROM UPS 162	**Pass/Fail**
18. Close R.P.S. BUS #11 MAINTENANCE SUPPLY FROM I&C BUS 130A **Cue:** All other actions will be performed by another operator.	☐ Close R.P.S. BUS #11 MAINTENANCE SUPPLY FROM I&C BUS 130A	**Pass/Fail**
19. Report status to SRO	☐ SRO notified of status.	Sat/Unsat
END OF JPM		

Terminating Cue: Transfer of RPS Bus 11 from UPS 162 to I &C Bus 130A is complete.
RECORD STOP TIME _____

[redacted]

JPM HISTORY

JPM HISTORY PAGE				
Revision	Date	Change Driver	Originator	Description
0	10/3/06	LC1 05-01 NRC Exam	G. Bobka	Modified JPM for Unit 1 LC1 05-01 NRC Exam
0	10/6/06	LC1 05-01 NRC EXAM	W. Coppom	Performed a system walk down with Eric Kelsey of Operations

Initial Conditions:

1. Plant at 100% power
2. UPS 162A in service supplying RPS Bus 11
3. UPS 162B in standby
4. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), transfer RPS Bus 11 from UPS 162A to UPS 162B per N1-OP-40."

NINE MILE POINT NUCLEAR STATION

OPERATOR JOB PERFORMANCE MEASURE

Title: Control Room E Actions For Control Room Evacuation (N1-SOP-21.2) (Alternate Path) Revision: 0

Task Number: 2009170501

Approvals:

_____ / _____	NA EXAM SECURITY / _____
General Supervisor Operations Training (Designee) Date	General Supervisor Operations (Designee) Date
NA EXAM SECURITY / _____	
Configuration Control Date	

Performer:_____(RO/SRO)

Trainer/Evaluator:_____

Evaluation Method: _____ Perform ____X____ Simulate

Evaluation Location: _X_____ Plant _____ Simulator

Expected Completion Time: 20 min Time Critical Task: No Alternate Path Task: Yes

Start Time: _____ Stop Time:_____ Completion Time:_____

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluators Signature:_____ Date:_____

Recommended Start Location: (Completion time based on the start location)

Turbine Bldg. 261

Simulator Set-up (if required):

None

Directions to the Instructor/Evaluator:

Prior to performance of this JPM, obtain SM / CSO general permission to open equipment cabinets and inspection covers. If opening the equipment cabinet or inspection cover will affect Tech. Spec. Operability, operational status, or the effects are unknown, obtain specific SM / CSO permission.

Directions to Operators:

Read Before Every JPM Performance:

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Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the independent/peer verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified in grading areas **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
   - Self verification shall be demonstrated.
3. During Training JPM:
   - Self verification shall be demonstrated.
   - (Independent/Peer/No other) verification shall be demonstrated.

References:

1. N1-SOP-21.2
2. NUREG K/A 286000 A3.04 3.2/3.3

Tools and Equipment:

None

Task Standard: Control Room E actions complete.

Initial Conditions:

1. A Control Room Evacuation has been ordered due to a Fire.
2. Reactor has been scrammed and all control rods are fully inserted
3. Main Turbine CANNOT be tripped from the control room
4. Feedwater Pump 13 is disengaged
5. Powerboard 11 and 12 are energized
6. Ask operator for any questions.

Initiating Cues:

"(Operator's name), perform Control Room E actions of N1-SOP-21.2, Control Room Evacuation".

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary.* **RECORD START TIME _____**	Proper communications used for repeat back (GAP-OPS-01/ CNG-HU-1.01-1001)	Sat/Unsat
2. Use a copy of the reference procedure and review/utilize the correct section of the procedure.	☐ N1-SOP-21.2 obtained.	Sat/Unsat
3. Trip Main Turbine by rotating AND pulling MASTER TRIP at Front Standard (TB EL 300')	☐ Main Turbine tripped by rotating AND pulling MASTER TRIP at Front Standard (TB EL 300').	**Pass/Fail**
4. Disengage Feedwater Pump 13 by closing FV-1 BV-FW PMP 13 CLUTCH FRICTION CLUTCH OIL SUP (TB EL 300')	☐ Step is not implemented based on initial conditions.	Sat/Unsat/ NA
5. Proceed to PB 11 and 12	☐ PB 11 and 12 proceeded to.	**Pass/Fail**
6. At PB 11 and 12, verify the following:	☐ At PB 11 and 12, the following are verified:	
a. Breaker R122 open **CUE:** Breaker R122 green light ON and red light OFF	☐ Breaker R122 verified open by observing local indications.	**Pass/Fail**
b. Breaker R113 open **CUE:** Breaker R113 green light ON and red light OFF	☐ Breaker R113 verified open by observing local indications.	**Pass/Fail**

c. Breaker R112 closed

CUE: Breaker R112 red light ON and green light OFF

☐ Breaker R112 verified closed by observing local indications. **Pass/Fail**

d. Breaker R123 closed

CUE: Breaker R123 red light ON and green light OFF

☐ Breaker R123 verified closed by observing local indications. **Pass/Fail**

e. 11 OR 13 Condensate Pump running

CUE: 11 Condensate Pump breaker red light ON and green light OFF

☐ 11 Condensate Pump verified running by observing local indications. **Pass/Fail**

f. 11 OR 13 Booster Pump running

CUE: 11 Booster Pump breaker red light ON and green light OFF

☐ 11 Booster Pump verified running by observing local indications. **Pass/Fail**

g. One Feedwater Pump running

CUE: 11 Feedwater Pump breaker red light ON and green light OFF

☐ One Feedwater Pump verified running by observing local indications. **Pass/Fail**

CUE: Direct the candidate to report to Diesel Generator Room 102 first.

7. Proceed to Diesel Generator/PB rooms 102 (TB EL 261')

CUE: When DG room is entered inform candidate that engine sounds as though it is running. Upon investigation of output breaker and generator indications, candidate determines engine running and loaded (Loss of Offsite Power has occurred).

☐ Proceeded to Diesel Generator/PB rooms (TB EL 261'). **Pass/Fail**

8.

a. Place D/G Control in LOCAL. ☐ D/G Control placed in LOCAL. **Pass/Fail**

b. Monitor D/G(s) voltage AND HOT ☐ D/G(s) voltage AND HOT ENGINE Sat/Unsat

Performance Steps	Standard	Grade
ENGINE light.	light monitored.	
CUE: Hot engine light is lit		
9. Notify ASSS and shutdown EDG 102 as follows:	ASSS notified and EDG 102 shutdown as follows:	
a. Close 96-82, Air Shutoff Ahead Flex Conn, to Diesel 102. **CUE:** 96-82 is closed	☐ 96-82, Air Shutoff Ahead Flex Conn, to Diesel 102 closed.	**Pass/Fail**
b. Depress red RESET AND FAST STOP pushbutton **CUE:** Red Reset and Fast Stop pushbutton depressed. EDG 102 is no longer running.	☐ Red RESET AND FAST STOP pushbutton depressed.	**Pass/Fail**
c. Verify tripped R1022, D/G Output Bkr (PB102). **CUE:** R1022 breaker green light ON and red light OFF	☐ Tripped R1022, D/G Output Bkr (PB102) verified tripped by observing local indication.	**Pass/Fail**
d. Pull CLOSE fuses, R1022 D/G Output Bkr (PB102) Fuses are located inside breaker cubicle. SIMULATE opening cubicle door to access fuse block. **CUE:** CLOSE fuses are pulled	☐ CLOSE fuses, R1022 D/G Output Bkr (PB102) pulled.	**Pass/Fail**
10. Report Control Room E actions are complete.	☐ Identifies that WAIT block is entered and waiting for conditions to be met before proceeding.	Sat/Unsat
	☐ Reports actions are complete.	Sat/Unsat

END OF JPM

Terminating Cue: Control Room E actions complete

RECORD STOP TIME _____

JPM HISTORY

JPM HISTORY PAGE				
Revision	Date	Change Driver	Originator	Description